The relationship between form and structure in the dome of the Basilica of San Gaudenzio in Novara.

Massimo Corradi

Abstract The dome of San Gaudenzio in Novara, by Alessandro Antonelli, is the most comprehensive architectural synthesis of the profound relationships between mechanics and geometry, material and construction, science and technology; it is compendium of science and art of building in a single architecture. The complex interrelationships between form and structure, architecture and construction, in a complex play of geometric forms and structural elements, are fully evident by complex architectural and structural system of masonry skeleton in the Antonelli’s dome. Without going into the specifics of the history of the Basilica of Novara for which there is sufficient literature to explore, in this short note we investigate the complex and perhaps even tormented path planning and construction of the dome of San Gaudenzio. Antonelli has been able to build and raise the most daring and the tallest masonry construction in the history of modern Italian architecture. Unique work of art, not repeated, brilliant and, sadly, still little known and studied, in its innermost mysteries that embrace the art of building, and the daughter of an important maître penser, even a symbol of constructive genius of the most intriguing characters of the Italian architecture of the nineteenth century.

Keywords Alessandro Antonelli, dome, masonry